

# PEREIRA POTABLE WATER AND SANITATION PROGRAM

(CO-0182)

## EXECUTIVE SUMMARY

**Borrower:** Empresa de Acueducto y Alcantarillado de Pereira [Pereira Water and Sewer Corporation] (AAP)

**Guarantor:** Republic of Colombia.

**Executing agency:** Empresa de Acueducto y Alcantarillado de Pereira S.A. E.S.P.

<b>Amount and source:</b>		<u>Phase 1</u>	<u>Phase 2</u>
	IDB: (OC)	US\$38.6 million	US\$23.0 million
	Local:	US\$26.0 million	US\$15.3 million
	Total:	US\$64.6 million	US\$38.3 million

<b>Financial terms and conditions:</b>	Amortization period:	25 years
	Disbursement period:	5 years (phase 1)
	Grace period:	5 years
	Interest rate:	variable
	Inspection and supervision:	1%
	Credit fee:	0.75% on the undisbursed balance
	Currency:	U.S. dollars, Single Currency Facility

**Background:** The proposed program, conceived and analyzed as an operation with an estimated aggregate cost of US\$102.9 million, will be carried through in two phases. The IDB would supply US\$61.6 million in funding. The phased approach was prompted by two considerations: (i) how to make the new water and sewer utility self-financing and achieve operational efficiencies as quickly as possible, and (ii) how to make certain the new corporation executes an optimized facilities plan for water and sewer plant, given the financial constraints anticipated in its early years. In accordance with the appraisal findings, the first of the two phases would consist of corporate-development actions and waterworks investments, which in the short term would benefit the corporation's finances and efficiency. It also would include emergency work on sewers to avoid material losses and prevent landslides on city creek banks, which could take a human toll in low-income communities located there. In the second phase, investments would be made in the sewer system to clean up the environment in built-up areas adjacent to rivers, conveying sewage to the city limits. The two phases are at once standalone operations (since each would

separately yield enough benefits to warrant its implementation) and mutually complementary, since the phase 2 sanitation works will round out the phase 1 waterworks outlays.

Each phase would be supported by a separate Bank loan (US\$38.6 million and US\$23 million, respectively). Phase 1 would take five years, phase 2 three years, to begin at the start of the fourth year of phase 1. The following will be prerequisites for approval of phase 2: (i) in each year elapsed of phase 1, a surplus from internal cash generation, after counterpart contributions, equal to at least 12% of AAP's aggregate long-term bank debt; (ii) a demonstration, in updated projections, that local counterpart funds will be forthcoming for the rest of phase 1 and throughout phase 2, and that the debt can be serviced in both phases; (iii) completed designs for all works and a final resettlement plan, including proof of possession of land for the aforesaid plan for the phase 2 works; (iv) awarding of a BOT contract for construction and operation of the first sewage treatment plant; the contract award will be subject to formalization of IDB financing for the phase 2 interceptor and collector sewers, and the bid documents must so state; and (v) fulfillment of conditions for the third package of phase 1 works. Performance of these conditions will be assessed by a technical/financial audit firm engaged by AAP with the Bank's no objection (see paragraphs 3.16-3.18 of the proposal which follows).

**Objectives:**

The program's objective is to support AAP as it develops and consolidates itself as a technically sound, operationally efficient utility corporation. The specific objectives are to: (i) foster AAP's operational and financial sustainability; (ii) help create conditions to interest the private sector in building and operating a sewage treatment plant; (iii) make for more efficient water distribution; (iv) bring piped water to new settlements in the city, including low-income neighborhoods; and (v) improve the urban environment.

The program would be divided into various subprograms and components, described in the following section. To pursue the first specific objective, a management contract would be signed with an operating company, a downsizing component would be executed (subprogram 1, components 1 and 2), and a performance plan would be devised. For the second objective, program funds would defray part of the cost of preparing a BOT deal (subprogram 1, component 3). The third objective would be achieved by bringing in reliable at-source and customer water metering systems, building water distribution tanks, and repairing leaks (subprogram 2, component 1). Distribution networks would be built to attain the fourth objective (subprogram 2, component 2). The last-named objective, urban-sanitation improvement, will be achieved through subprograms 3 and 4.

**Description:** The program would be divided into four subprograms; the fourth of them to be implemented during phase 2.

**Subprogram 1. Corporate development and private-sector involvement (US\$6 million),** with three components.

For **Component 1**, "accelerated integrated corporate management development" (DIAGE) (US\$3.6 million), a specialized firm (the operating company) will be hired for an estimated period of at least four years for integrated management development of AAP. It will be accountable for attaining operational and financial performance ratios set out in the performance plan and updated in the AAP/operating company contract. **Component 2**, downsizing (US\$1.5 million) is a voluntary retirement program to be paid for entirely with local funds. **Component 3** to foster private-sector involvement (US\$900,000) will finance work to prepare for the hiring of the DIAGE contract operating company and part of the cost of studies and bid-document preparation to tender a BOT contract for the treatment plants.

**Subprogram 2. Investments for waterworks (US\$13.7 million),** two components.

Under **Component 1**, designed to reduce volumes of unaccounted-for water (US\$10.4 million), system meters will be installed in the four water treatment plants, the six distribution tanks, and water mains. Leaks will be located and repaired, supply circuits will be segmented and mapped out, 110,000 home meters and about 500 meters for significant customers will be replaced, and four tanks will be built with a combined capacity of 10,800 cubic meters. **Component 2**, for water delivery (US\$3.3 million), will install two conveyance mains 2.1 km long and about 15.9 kilometers of distribution lines.

**Subprogram 3. Investments for sewers, phase 1 (US\$20.1 million),** to clean up city creeks. Three components.

Activities in **Component 1**, cleanup of creeks (US\$16 million) are: (i) laying of 31.1 km of interceptor sanitary sewers along 12 city creeks; (ii) rehabilitation of 7.6 km of sewer lines; (iii) construction of 18 relief sewers 15.2 km long draining into the Otún River, and construction of 18 structures to separate sewage from stormwater; construction of 20 relief sewers 2.9 km long draining into the Consota River and several tributaries, and building of 20 sewage/stormwater separation structures; and (iv) building of 1.1 km of open channel on the downstream part of El Oso Creek to its confluence with the Consota River.

**Component 2**, resettlement (US\$2.8 million), includes the relocation, in accordance with Bank resettlement policy, of 137 families living on land on which sewers would be built and compensation to 170 families

on whom the work would have some impact. This component also will fund studies to produce the final resettlement plan corresponding to the phase 2 sewer work. **Component 3**, environmental education and protection (US\$1.3 million), provides for environmental protection structures along the stretches of eight creeks where interceptor sewers will be built, preparation of an environmental management plan for the Otún River middle and upper watershed, and environmental education projects.

**Subprogram 4. Investments for sewers, phase 2 (US\$25.7 million).**

The three components comprising this subprogram will improve the state of the city's rivers by taking sewage and stormwater to the edge of the built-up area, eventually for conveyance to the treatment plant.

**Component 1**, cleanup of rivers (US\$23.6 million), consists of: (i) rehabilitation of 6.5 km of sewer lines; (ii) construction of 26.1 km of sewers along the Otún and Consota rivers, to what will be the start of the final outfall for wastewater conveyance to the future sewage treatment plant; that outfall and the treatment facility would be built under a BOT contract format; and (iii) construction of 3.4 km of reinforced concrete channel along part of La Dulcera Creek, to a point before it meets the Consota River. Under **Component 2**, for resettlement (US\$1 million), 150 families that stand to be affected by the interceptor construction would be resettled. **Component 3**, environmental education and protection (US\$1.1 million), will build environmental protection structures in La Dulcera Creek and along stretches of the Otún and Consota rivers, and carry out activities that are part of the Otún and Consota watershed management plan.

**Relationship of project in Bank's country and sector strategy:**

The Bank is pursuing five objectives in its strategy for operations with Colombia: (i) support for the peace process and its sustainability; (ii) reduction of poverty and inequality; (iii) consolidation of decentralization; (iv) modernization of the State apparatus; and (v) promotion of sustainable growth. The sanitation sector is identified as a strategy focus in the second and fifth of these objectives.

The proposed program would pursue the Bank's strategy by: (i) helping in the delivery of modern, efficient utility services, by way of the new water and sewer corporation; (ii) decidedly raising city residents' living standards, as the quality of water and sewer services improves, yielding immediate environmental benefits when surface discharges of sewage into rivers bordering the city (areas that are home mainly to low-income residents) are halted; (iii) promoting private-sector participation in the sector; and (iv) supporting the development of the sector in a medium-sized city.

**Environmental and social review:**

The program's benefits would take the form of improved water delivery, cleaner rivers and creeks, and flood control. Its main direct social impact would be the resettlement of 137 families affected by the works. Following recommendations of the Committee on Environment and Social Impact, provision has been made for: (i) specified milestones relating to sewage treatment service, to be attained before funds can be committed for the phase 2 works packages; (ii) AAP to demonstrate, before it may award construction contracts, that the bid documents include the environmental requirements and standards recommended in the environmental impact assessments and approved by the Bank; and (iii) AAP to outline, in its annual reports, progress made on the environmental management plan and the follow-up of residents affected by the resettlement plan, and any adjustments to same (see paragraphs 3.27-3.30).

**Benefits:**

- a. Modernization of AAP management, with the ensuing gains in operational efficiency and financial sustainability.
- b. Improvement in water delivery by resolving problems with service interruptions, pressure, and conveyance, and reducing levels of unaccounted-for water.
- c. Cleanup of rivers bordering the city and associated improvements in residents' health. Flood control on the largest creeks will avert financial losses and a human toll in low-income communities that live on their banks.

**Risks:**

**Risk:** Lack of interest of operating companies in the management contract (DIAGE) or high bids because of perceived risks. **Mitigating provision:** Financing for the contract's fixed-remuneration component via the loan, to offer more attractive prospects to firms and ease their concerns over perceived risks.

**Risk:** Failure to bring in real rate increases according to the plan agreed on through 2001. **Mitigating provisions:** the contract will require a demonstration each year that the real rate increases have been brought in.

**Risk:** Indefinite postponement of construction of the sewage treatment plant for financial or technical reasons. **Mitigating provisions:** (i) a financial penalty will be assessed on above-tolerance polluters, making it expensive to defer the plant's construction indefinitely; in the case of Pereira, there is a grace period of about four years for this fine; (ii) the aim of the BOT studies included in the program is to find a viable technical and economic alternative whereby construction of this plant could be tendered out to the private sector; and (iii) phase 2 cannot begin until the treatment-plant contract is awarded.

**Special contractual clauses:****Conditions precedent to the first disbursement:**

- a. Creation and startup of the program-executing unit (paragraph 3.3).
- b. Hiring of a professional accountant in the finance department (paragraph 4.22).
- c. Presentation of an organization plan for an internal audit office and timetable for its implementation (paragraph 4.16).
- d. Presentation of certification of future appropriations for the municipal and national counterpart contributions (paragraph 2.26).
- e. Presentation of evidence of legal ownership of the land needed for phase 1 resettlement (paragraph 3.13).

**Other conditions:** In addition to the standard loan-contract covenants:

- a. IDB approval required for any change in ratios or other performance-plan requirements that may come out of negotiations with the operating company (paragraph 3.6).
- b. IDB approval required for AAP to commit loan proceeds for Group 2 and 3 works packages under phase 1 (paragraph 3.10).
- c. Annual review meetings (paragraph 3.15).
- d. Demonstration that the bid documents specify environmental standards and requirements (paragraph 3.20).
- e. Presentation of annual reports on maintenance of the works (paragraph 3.26).
- f. Presentation of audited financial statements of the program and of the corporation (paragraph 3.32).
- g. Semiannual evaluation reports on the performance plan (paragraph 3.8).
- h. Startup of the internal audit office (paragraph 4.16).
- i. Restrictions in phase 1 on capital outlays other than those funded by the program (paragraph 5.8).
- j. Effective application of real tariff increases and adjustment of rates for inflation (paragraph 4.25).

**Recognition of expenditures:** The Bank may recognize, against the local counterpart, up to US\$4,858,000 in expenditures on studies and works that are part of the program provided they were incurred within the 18 months preceding approval of the loan and after March 1998. Likewise, it may recognize US\$170,000 against the loan proceeds for the preparation of bid documents to engage the operating company.

**Poverty-targeting and social sector classification:**

This operation qualifies as a project promoting social equity, as described in the key objectives for the Bank's activities in the Report on the Eighth General Increase in Resources (document AB-1704) (paragraph 3.31).

**Procurement thresholds:**

Thresholds above which international competitive bidding will be mandatory for program procurement are US\$5 million for works and US\$350,000 for goods and associated services. There will be no contractor prequalification process, since there will be no large contracts and the construction work is relatively straightforward.

**Exceptions to Bank policy:**

As an exception to the procedure for selecting consultants through open calls for offers, the direct hiring of the NGO Minuto de Dios, is recommended. This agency will carry out any type of procurement, hiring of consultants, or other activities required, pursuant to the Bank's procedures. The hiring of the NGO satisfies the provisions set forth in GS-403 of the Procurement Manual (paragraph 3.21).

As an exception to the policy for the selection of consulting firms based exclusively on quality, it is recommended that the consulting firm that will be drawing up the bid documents to hire the DIAGE operating company be selected on the basis of quality and price. The cost of these consulting services is equivalent to US\$170,000, the weighting factor will be no more than 30%, and the five interested candidates will compete on a level playing field (paragraph 3.22).

As an exception to the sovereign guarantee coverage policy, it is recommended that the government guarantee be limited to the loan payment obligations – including interest and credit fees – and that the Municipality of Pereira be required to provide the guarantee for the local counterpart and for the measures needed to fulfill the objectives of the financing (paragraph 4.1).